NEVADA CLIMATE SUMMARY

Office of the
State Climatologist
Offices:
226 and 322 Mackay Science
(702)784-6995
(702)784-1723

JANUARY 1990
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John W. James
State Climatologist
Mackay Science Hall
University of Nevada-Reno
Reno, NV 89557

SYNOPSIS

January 1990 was a little warmer than normal over all except the extreme southern tip of Nevada, and a small area in Northwestern Nevada. This maintains the pattern of the past few years where warmer than normal temperatures have greatly outnumbered cool ones. This has been especially true during the Winter Half-year.

Precipitation was more of a "mixed bag," as one of the wettest Winter storms in many years ended a record 4 1/2 month Southern Nevada dry spell. As a result totals were two to three times the January normal in much of Extreme Southern Nevada. The northwestern 1/3 of the State followed a completely dry December, with only a 1/3 to 2/3 normal January during these usually wettest months of the year.

Water Year Precipitation (October 1, 1989--January 31, 1990) is now between 20% and 80% of normal; lowest in portions of South Central and east central Nevada and highest in parts of the Northeast and the South. East Slope Sierra Nevada Watersheds are only about 1/2 normal, with the Humboldt River Area 1/2--3/4.

Upstream Colorado River tributaries (that supply water to Lake Mead and Las Vegas) are also well below normal at this point, as much of Nevada suffers through an unprecedented 4th year of drought.

TEMPERATURES

Temperatures averaged on the warm side again this month, with only the southern tip of Nevada and a small area in the Northwest, being a little cooler than normal (e.g. Searchlight -1 degree and Fallon -2 degrees). Most of the State was 1-3 degrees above long-term normals (e.g. Minden and Denio +3 degrees). Several locations set or nearly set new highs for January as an early-month warm spell moved the mercury up into the 60's and 70's at many locations. For example, at Lemmon Valley (near Reno), Gene Klump recorded 68 degrees for a 17 year January high, the same as at the Honey Lake Wildlife Fleming station (NW of Sutcliffe) where it was a 32 year maximum. The highest recorded temperature in the Silver State was 78 degrees at Amargosa Farms Garey on the 11th, with 77 degrees at Laughlin and 75 degrees at Cottonwood Cove (near Searchlight) not far behind. These readings were well below the 84 degrees recorded at Logandale in January 1931.

On the cool side it wasn't very cold, as extreme low temperatures weren't near the -50 degrees recorded at San Jacinto

(north of Wells) in January 1937. Wildhorse Reservoir fell to -24, Deeth and Mountain City to -17, and Ruth and Reese River O'Toole had -15 degrees, the same as recorded by Cheryl Morrison at Diamond Valley near Eureka.

Understanding the site is a prerequisite for interpretation of the climate of a location. This is well illustrated by comparing data from Tonopah and the Tonopah Airport. January's mean daily maximum was 41 degrees at Larry Young's higher and mountainous downtown site, 4 degrees colder that than at the valley bottom Airport location, located a few miles to the east and several hundred feet lower. However, because of cold air drainage the Airport location averaged 5 degrees colder at night (18 degrees) than "up there" in downtown Tonopah (23 degrees). The coldest night of the month (9th) saw the mercury fall to only 13 degrees at the site in town, but down to 6 degrees at the Airport in the valley. Precipitation is also affected by site as the higher, rugged townsite received over 3 times the Airport amount (.71" vs .22"). The differences described are typical in Nevada and present a challenge to climatologists.

PRECIPITATION

Dry in the Northwest and wet in the South was the order of the month in Nevada, as drought continued Statewide. An unusually wet winter storm in Southern Nevada brought the most winter precipitation in many years, ending a completely dry 4 1/2 month record dry spell, and alleviating extreme drought conditions somewhat. An unusual situation occurred this winter month with the wettest Nevada locations at Mt. Charleston Division of Forestry (3.79" and 45" of new snow) and Mountain Springs Summit (3.29", 2.07" on the 18th, 17" of snow). Both locations are in the Spring Mountains north of Las Vegas. These amounts were well above the usually, winter-wet Sierra Nevada, where Upper Incline could manage only 2.72" and 28" of new snow, well below the January normals. In the Northeast, Wildhorse Reservoir had an above normal 2.35" and Owyhee 2.70."

Low elevation precipitation totals in Southern Nevada were also impressive, as the mid-month storm brought over an inch of rain and snow to low elevations. For example, at Boulder Beach near Lake Mead, weather observer Malcom Demunbrun recorded 1.39" of precipitation and 2" of snowfall! Nearby Callville Bay had 1.77."

On the dry side, Toppie Watson at Kingston Canyon (SE of Austin) had only .02", Lovelock .06", Antelope Valley Farr .11, with Ivan Meyers at Gerlach recording only 14."

SUNSHINE WIND, AND EVAPORATION

Sunshine hours were above normal in the South (e.g. Las Vegas had 87% of the possible sun hours vs. a normal of only 76%), but below normal in the remainder of the State. For example, Reno had only 50% of the possible sunshine and a normal of 66%.

Average wind speeds were near or above normal Statewide, with peak gusts reaching over 50 mph several days in the Northwest, with 70 mph plus speeds in the Reno area under mountain wave conditions on the 8th. Only minor damage resulted. Downtown Winnemucca weather observer Gary Rinaudo recorded peak gusts of 50 mph on at least two separate occasions during January.

Evaporation was above normal again this month, with Boulder City having a record January 5.11" of water loss, about 2" above the long-term normal. Most pans were stored for the winter, but higher than normal wind speed and temperatures as well or below normal precipitation at most locations added up to greater than normal evaporation.

NOTE: We wish to express our deepest sympathy to Coleman Valley weather observers Lonny and Jean Schadler for the recent loss of their daughter.

John James
State Climatologist

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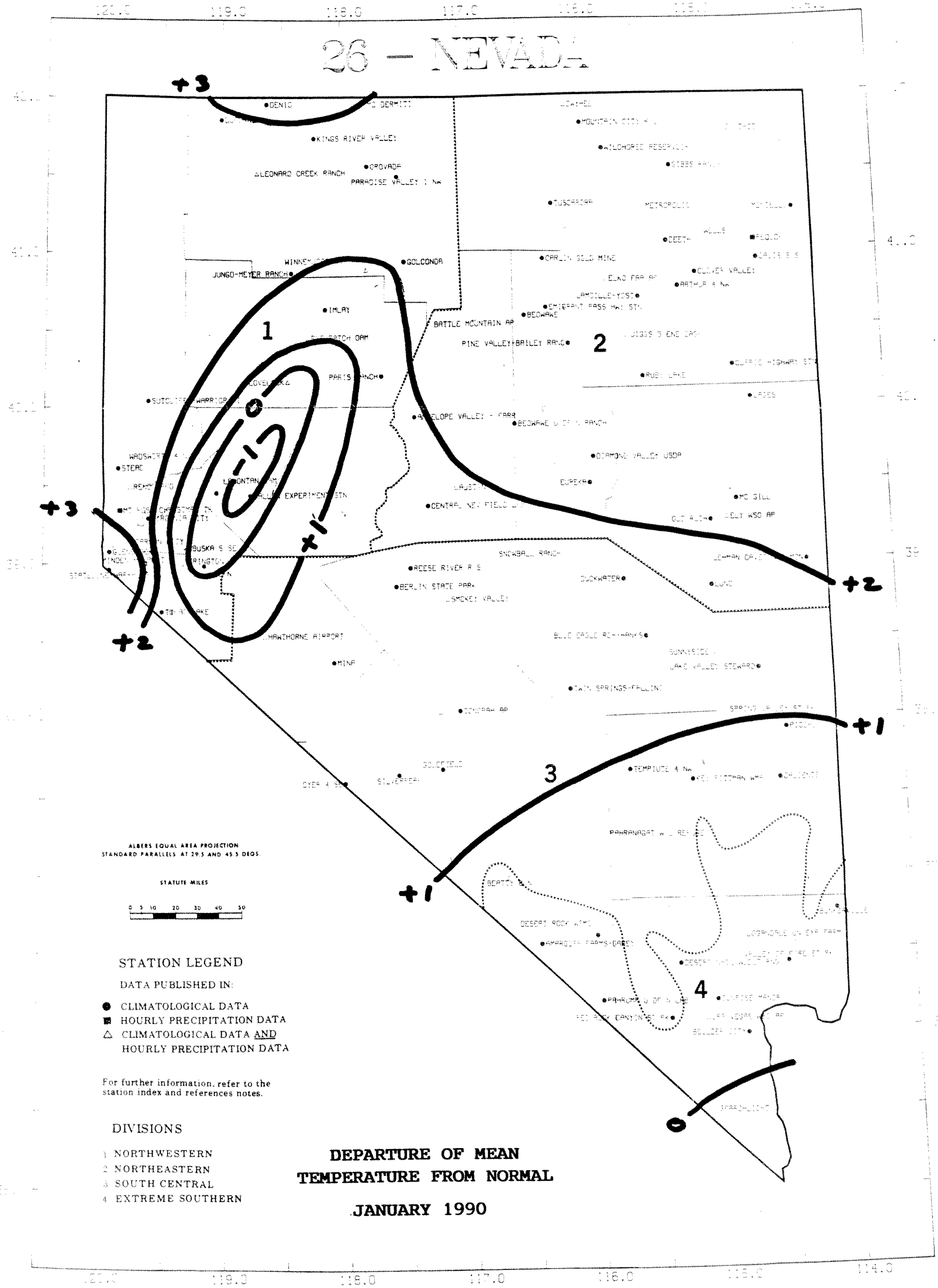
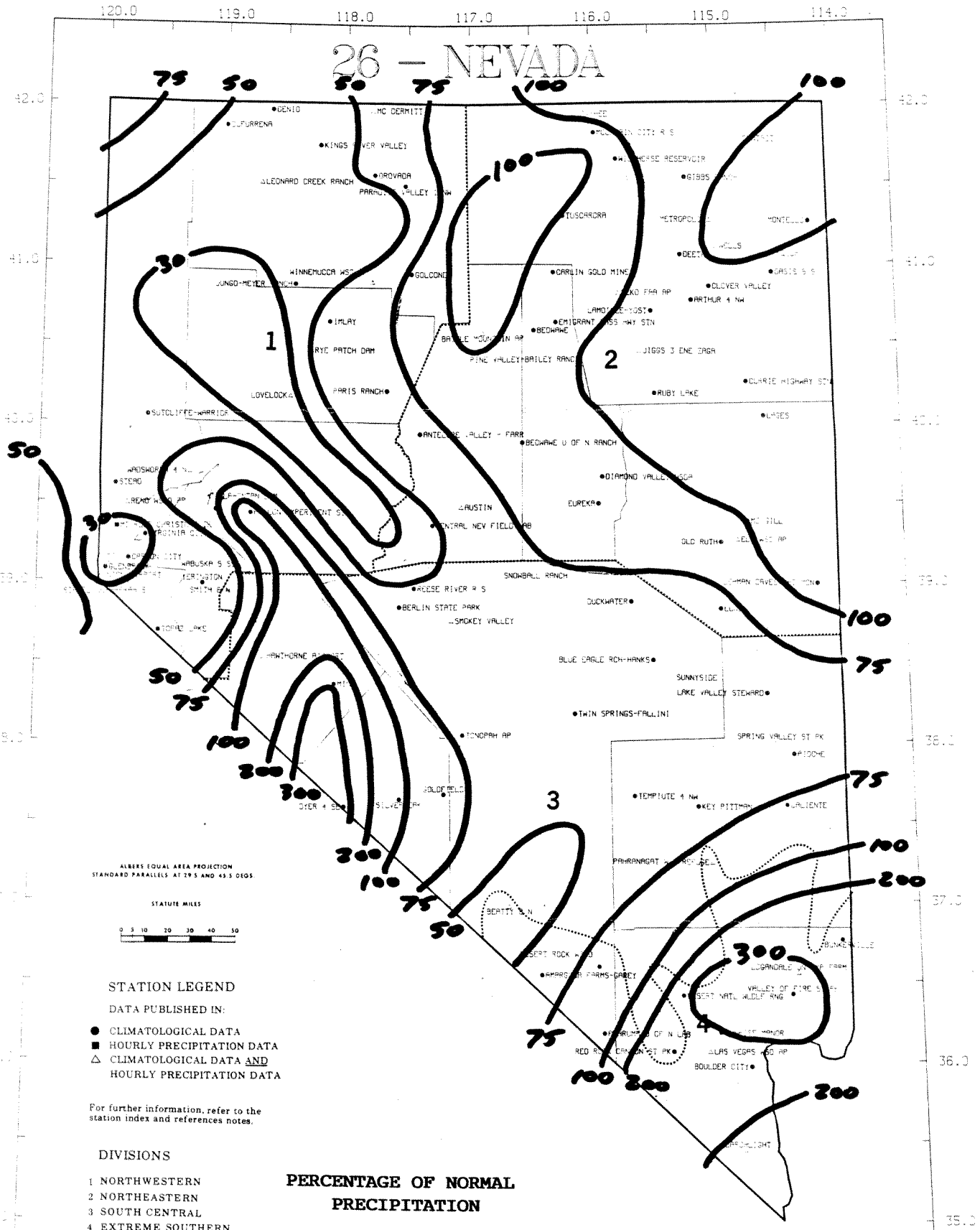


DEPARTURE OF MEAN TEMPERATURE FROM NORMAL

JANUARY 1990



STATION LEGEND

DATA PUBLISHED IN:

- ● CLIMATOLOGICAL DATA
- ■ HOURLY PRECIPITATION DATA
- △ CLIMATOLOGICAL DATA AND HOURLY PRECIPITATION DATA

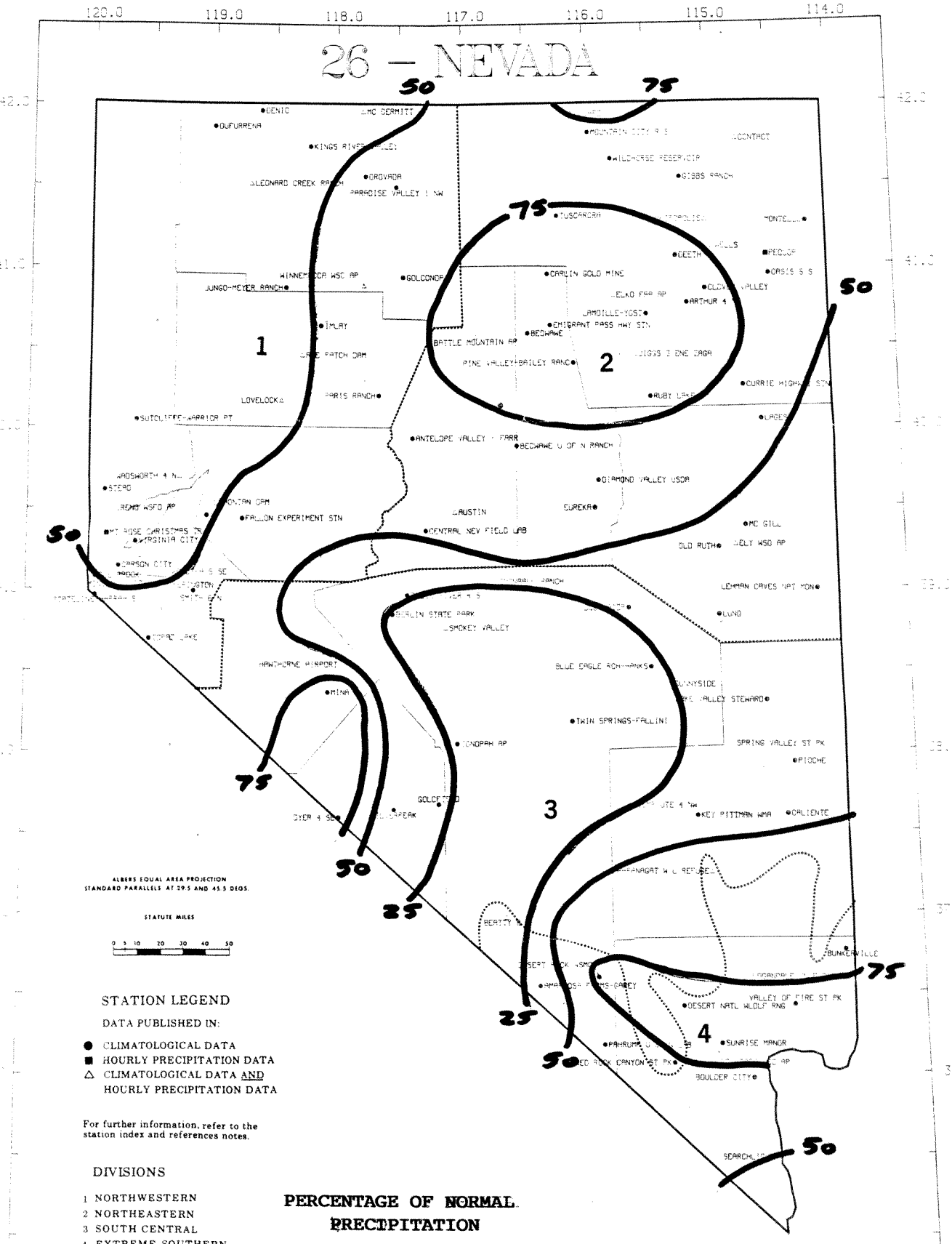
For further information, refer to the station index and references notes.

DIVISIONS

1 NORTHWESTERN
2 NORTHEASTERN
3 SOUTH CENTRAL
4 EXTREME SOUTHERN

PERCENTAGE OF NORMAL PRECIPITATION

JANUARY 1990


26 – NEVADA
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118.0
117.0
116.0
115.0
114.0
42.0
41.0
38.0
37.0
36.0
35.0
50
75
25
1
2
3
4
DENIO
MC DERMITT
DUFURRENA
KINGS RIVER VALLEY
LEONARD CREEK RES
OROVADA
PARADISE VALLEY 1 NW
MOUNTAIN CITY R S
CONTRACT
WILDHORSE RESERVOIR
GIBBS RANCH
TUSCARORA
DEETH
PEQUOP
OASIS 5 S
WINNEMUCCA WSC AP
GOLCONDA
JUNGO-MEYER RANCH
CARLIN GOLD MINE
ELKO FAA AP
ARTHUR 4
JAMOILLE-YOST
EMIGRANT PASS HWY STN
IMLAY
BATTLE MOUNTAIN AP
BEDAWE
PINE VALLEY-BAILEY RANC
RUBY LAKE
CURRIE HIGHWAY STN
LOVELOCK
PARIS RANCH
SUTCLIFFE-HARRIOR PT
ANTELOPE VALLEY - FARR
BEDAWE U OF N RANCH
LAGES
ARDSWORTH 4 N
STEAD
RENO WSFO AP
FALLON EXPERIMENT STN
DIAMOND VALLEY USDA
EUREKA
AUSTIN
CENTRAL NEV FIELD LAB
MC GILL
OLD RUTH
ELY WSO AP
MT ROSE CHRISTMAS TR
VIRGINIA CITY
CARSON CITY
LEHMAN CAVES NAT MON
LUND
BERLIN STATE PARK
SMOKEY VALLEY
WALKER LAKE
HAWTHORNE AIRPORT
BLUE EAGLE RCH-HANKS
MINA
TWIN SPRINGS-FALLINI
TONOPAH AP
SPRING VALLEY ST PK
PIOCHE
GOLDFIELD
DYER 4 SE
KEY PITTMAN WMA
CALIENTE
BEATTY
BUNKERVILLE
VALLEY OF FIRE ST PK
DESERT NATL WLDLF RNG
SUNRISE MANOR
BOULDER CITY
SEARCHLIGHT
ALBERS EQUAL AREA PROJECTION
STANDARD PARALLELS AT 29.5 AND 45.5 DEGS.
STATUTE MILES
0 5 10 20 30 40 50
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4 EXTREME SOUTHERN
PERCENTAGE OF NORMAL PRECIPITATION
WATER YEAR 1989-1990
(Oct. 1, 1989-Jan. 31, 1990)